

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

2

AMENDMENTS TO THE CLAIMS:

1. (Original) A data transferring apparatus for transferring transfer packets each including one or more transfer data as objectives of transfer from a first apparatus to a second apparatus, said each transfer data including commands indicating processes against a preliminarily assigned area, said first apparatus including:

a scheduler for merging a plurality of said transfer data meeting a certain requirement;

and

a communication controller for generating transfer packets each including at least one of one or more said transfer data whose amount is within a certain predetermined range and one or more said merged transfer data,

said communication controller transferring said generated transfer packets to said second apparatus.

2. (Original) A data transferring apparatus for transferring transfer packets each including one or more transfer data as objectives of transfer from a first apparatus to a second apparatus, said each transfer data including commands indicating processes against a preliminarily assigned area, said first apparatus including:

means for merging a plurality of said transfer data meeting a certain requirement;

means for generating transfer packets each including at least one of one or more said transfer data whose amount is within a certain predetermined range and one or more said merged transfer data; and

means for transferring said generated transfer packets to said second apparatus.

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

3

3. (Original) The apparatus of claim 2, wherein said means for merging comprises a scheduler for judging whether an offset can be performed by merging an increment of data volume caused by a change of drawing commands.

4. (Original) The apparatus of claim 3, wherein if said scheduler judges that said offset is possible, then said scheduler changes the drawing commands.

5. (Original) The apparatus of claim 3, wherein said means for generating comprises a communication controller which generates said transfer packets which contain merged drawing commands which are more than a predetermined data volume in quantity.

6. (Original) The apparatus of claim 2, wherein said first apparatus comprises a computer and said second apparatus comprises a display apparatus.

7. (Original) A data transferring method for transferring transfer packets each including one or more transfer data as objectives of transfer from a first apparatus to a second apparatus, said each transfer data including commands indicating processes against a preliminarily assigned area, and said first apparatus being capable of:

merging a plurality of said transfer data meeting a certain requirement;

generating transfer packets each including at least one of one or more said transfer data whose amount is within a certain predetermined range and one or more said merged transfer data; and

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

4

transferring said generated transfer packets to said second apparatus.

8. (Original) The method of claim 7, wherein said merging comprises judging whether an offset can be performed by merging an increment of data volume caused by a change of drawing commands.

9. (Original) The method of claim 8, wherein if said judging judges that said offset is possible, then the drawing commands are changed.

10. (Original) The method of claim 7, wherein said first apparatus comprises a computer and said second apparatus comprises a display apparatus.

11. (Currently amended) A medium for mediating a program for transferring transfer packets each including one or more transfer data as objectives of transfer from a first apparatus to a second apparatus, said each transfer data including commands indicating processes against a preliminarily assigned area, and said first apparatus being capable of making a computer execute the steps of:

merging a plurality of said transfer data meeting a certain requirement;

generating transfer packets each including at least one of one or more said transfer data whose amount is within a certain predetermined range and ~~and/or~~ one or more said merged transfer data; and

transferring said generated transfer packets to said second apparatus.

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

5

12. (Original) The medium of claim 11, wherein said merging comprises judging whether an offset can be performed by merging an increment of data volume caused by a change of drawing commands.

13. (Original) The medium of claim 12, wherein if said judging judges that said offset is possible, then the drawing commands are changed.

14. (Original) The medium of claim 12, wherein said first apparatus comprises a computer and said second apparatus comprises a display apparatus.

15. (New) The apparatus of claim 1, wherein said scheduler generates a plurality of drawing instructions to be transferred from said first apparatus to said second apparatus by combining an effect of a plurality of drawing instructions which affect a same area in a predetermined short period of time on a frame buffer.

16. (New) The apparatus of claim 2, wherein said means for merging generates a plurality of drawing instructions to be transferred from said first apparatus to said second apparatus by combining an effect of a plurality of drawing instructions which affect a same area in a predetermined short period of time on a frame buffer.

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

6

17. (New) The method of claim 7, wherein said merging further comprises generating a plurality of drawing instructions to be transferred from said first apparatus to said second apparatus by combining an effect of a plurality of drawing instructions which affect a same area in a predetermined short period of time on a frame buffer.
18. (New) The apparatus of claim 1, wherein said communication controller transfers only updated areas on a frame memory in a form of drawing commands to said second apparatus.
19. (New) The apparatus of claim 2, wherein said means for transferring transfers only updated areas on a frame memory in a form of drawing commands to said second apparatus.
20. (New) The method of claim 7, wherein said transferring comprises transferring only updated areas on a frame memory in a form of drawing commands to said second apparatus.
21. (New) The apparatus of claim 2, wherein said first apparatus includes a first drawing engine and said second apparatus includes a second drawing engine.
22. (New) The apparatus of claim 2, wherein said first apparatus and said second apparatus include redundant drawing engines.
23. (New) The apparatus of claim 2, wherein said first apparatus comprises a computer including a first drawing engine, and

U.S. Serial No. 09/684,328
Attorney Docket No. JA919990169US1
(YOR.235)

7

wherein said second apparatus comprises a display apparatus including a second drawing engine.

24. (New) The apparatus of claim 21, wherein said first drawing engine and said second drawing engine each include a dedicated frame memory unit.

25. (New) The apparatus of claim 21, wherein said first drawing engine and said second drawing engine generate identical images including a different timing due to a data transfer delay from said first apparatus to said second apparatus.